ZIMBABWE'S EXPERIENCES IN ESTABLISHING AND STRENGTHENING THE NATIONAL RADIATION SAFETY INFRASTRUCTURE

Paper presented by Ambassador Grace Tsitsi Mutandiro, Zimbabwe's Ambassador and Permanent Representative to the International Atomic Energy Agency on the occasion of a special briefing session entitled "A new strategic approach to establishing and strengthening radiation safety infrastructure in Member States," jointly organized by the Department of Technical Cooperation and the Department of Nuclear Safety and Security on Monday 22 September 2014 during the 58th Regular Session of the IAEA General Conference.

Introduction

It is indeed an honor for my country to share with you our experiences in establishing and strengthening the national radiation safety infrastructure during this special briefing session entitled "A new strategic approach to establishing and strengthening national radiation safety infrastructure in Member States."

In 2009, Zimbabwe had very little in terms of radiation safety infrastructure. In fact in 2010, the Agency, , could not approve the supply of category two brachytherapy radioactive sources owing to the status of our regulatory infrastructure for radiation safety in particular the failure to meet the Agency's minimum requirements in Thematic Safety Areas 1 and 2 (Governmental and Regulatory Infrastructure and Occupational Exposure Control).

Move forward to 2014, six years later,

- Zimbabwe has a 35-member strong regulatory authority, the Radiation Protection Authority of Zimbabwe
- Zimbabwe will be receiving an Integrated Regulatory Review Service (IRRS) Mission in November 2014
- Zimbabwe is hosting fellows from the region to be trained in radiation safety infrastructure
- Zimbabwe has experts who participate in the Agency's expert missions

With these highlights I submit, Zimbabwe has a story to tell as the Agency is focusing on a new strategic approach to establishing and strengthening radiation safety infrastructure in Member States.

1) Establishment of the regulatory infrastructure

- In pursuance to the requirements of the IAEA Statute that the Government of Zimbabwe signed in 1986, the Government with assistance from the IAEA Office of Legal Affairs and Department of Technical Cooperation developed and enacted the Radiation Protection Act [Chapter 15:15] in 2004.

- The Act established the regulatory body for radiation safety, the Radiation Protection Authority of Zimbabwe (RPAZ) and its functions.
- The Government recognized the increasing role of nuclear and radiation technologies in the socio-economic development of the country and their importance in meeting the national Millennium Development Goals (MDGs).
- Furthermore, since 1990, Zimbabwe faced an increasing disease burden of cancer and tuberculosis cases requiring more health services to be equipped with state of the art technology including adopting the importance of nuclear science and radiation technologies. The Government also recognized the risks associated with the introduction of such technologies.
- IAEA's enforcement of the pre-requisite of satisfying the requirements of Thematic Safety Area 1: Governmental and Regulatory Infrastructure and Thematic Safety Area 2: Occupational Exposure Control in approving the supply of radiation sources played a significant role in the shaping of the national framework for safety as I have alluded to earlier in my introduction.
- In 2009, the Government invited the IAEA to conduct an advisory mission on the regulatory infrastructure for control of radiation sources. The Advisory Mission recommendations and action plan became very useful in the development of an operational regulatory infrastructure.

2) Leadership and Sustainability Issues

- The radiation safety agenda captured the attention of officials at the highest level of government. The Secretary for Health and Child Welfare wrote to the Chief Secretary to the President and Cabinet in 2009 recommending the need to ensure effective independence of the regulatory authority, an institution that was falling under his Ministry at that time and the need for national prioritization of establishing and strengthening the national radiation safety infrastructure.
- The Chief Secretary established a National Committee for the Safety and Security of Radiation Sources comprising of different stakeholders for the coordination and formulation of related policy issues and to spearhead the setting up of the national radiation safety infrastructure.
- The Government, following the recommendations of the IAEA Advisory Mission, resolved the effective independence of the regulatory body by re-assigning the administration of the Radiation Protection Act from the Ministry of Health and Child Care to the Office of the President and Cabinet in 2012.
- A board of directors was appointed to oversee the affairs of RPAZ. Operating within the national corporate governance framework, it was also tasked with ensuring strategic direction, accountability and control.

- The board of the Radiation Protection Authority of Zimbabwe in 2012 developed a 5-year strategic plan (2012-2016), to ensure regulatory body effectiveness and efficiency. The strategic plan focuses on ensuring regulatory body sustainability, improvement of internal processes, and human resource development.
- Human resources recruitment and retention: having lost all the staff (5 in total) who had worked in the Hazardous Substances and Articles Control Unit and later the Radiation Protection Unit in the Ministry of Health and Child Welfare in the period 1996-2008, the Government and the Radiation Protection Board recognized the importance of developing a sustainable human resource strategy to not only attract competent staff but also to retain them. To this end, the Government gives salary support to the regulatory authority thereby ensuring that the Radiation Protection Board pays competitive salaries, which have helped retain competent staff.
- Funding and resourcing of the regulatory authority: The Government of Zimbabwe fully appreciates its responsibility in establishing and strengthening national radiation safety infrastructure and to that end cooperates willingly with partners to support the Government's own efforts. The Government thus extends both capital and recurrent budgetary support in addition to allowing the regulatory authority to retain 100% of the receipts generated from licensing and other activities it carries out.
- Results Based Management: the Government of Zimbabwe operates on a Results Based Management framework that applies to all Government departments, state enterprises and parastatals. The regulatory authority being a statutory body is subject to this framework and this has contributed in making Radiation Protection Authority of Zimbabwe a results-driven organization. The Agency's Self-Assessment of Regulatory Infrastructure for Safety (SARIS) has been very useful as the regulatory authority is able to self-assess; develop an action plan and work on a program of continual improvement.

3) Technical Cooperation

- The IAEA Technical Cooperation Programme played a critical part in the development of the regulatory infrastructure in Zimbabwe. For example, through its participation in both Regional and national projects, Zimbabwe benefitted from national training courses for newly recruited technical staff, fellowships, expert missions and equipment. In parallel, under an innovative IAEA- EU joint action IV project, Zimbabwe received further assistance in building capacity at RPAZ through more training and equipment.

4) Challenges

- The establishment of the regulatory body coincided with a period of immense economic challenges for the country and this affected the capacity for the Government to adequately finance the activities of the regulatory body.
- There is still a need to develop the capacity of other stakeholders responsible for radiation safety in the country including:
    - Advisory bodies
    - Technical and Scientific Organizations (TSO)
    - Service Providers

Lessons Learnt

If we were to do this all over again, the Government of Zimbabwe would consider the following:-

- Developing a comprehensive policy on nuclear energy matters comprising of safety, security, safeguards, waste management, education and training.

- Concurrent development of other supporting structures for radiation safety and security such as advisory bodies, TSOs, service providers, education and training institutions.

Conclusion

The Government of Zimbabwe is highly indebted to the IAEA Secretariat for the assistance that has been provided to-date. We call on the Secretariat to continue assisting us to ensure that our regulatory infrastructure develops to the same level as our colleagues in the developed world.